

U.S. Department of Transportation

IAEA CERTIFICATE OF COMPETENT AUTHORITY SPECIAL FORM RADIOACTIVE MATERIALS

Pipeline and Hazardous Materials Safety Administration CERTIFICATE USA/0357/S-96, REVISION 11

This certifies that the sources described have been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency 1 and the United States of America 2 for the transport of radioactive material.

- 1. <u>Source Identification</u> Eckert & Ziegler Isotope Products (EZIP) source capsule Models 3203 and 3214.
- 2. Source Description Cylindrical single encapsulations made of Type 304 or 304L stainless steel, with a 0.05 mm (0.002 in.) thick window at one end, and fusion seal welded. Approximate outer dimensions are 7.9 mm (0.312 in.) in diameter and 5.1 mm (0.2 in.) in length. Construction shall be in accordance with attached EZIP Drawing No. 3203, Rev. G, Sheet 3 of 6 (Model 3203); or Isotope Products Laboratories Drawing No. A3214, Rev. A (Model 3214).
- 3. Radioactive Contents The sources described by this certificate are authorized to contain any one of the following radionuclides limited to the activity shown. The radionuclides are in the form of chlorides, nitrates, or oxides in ceramic; oxides in gold or aluminum; or metal plated onto substrate. The Na-22 may also be in the form of NaCl in gold or ceramic. The Ge-68 may also be in the form of GeO₂ in silver. The Sr-90 may also be in the form of SrTiO₄ in silver. The Ba-133 may also be in the form of BaSo₄ in ceramic.

¹ "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

² Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

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Radionuclide	Activity MBq	(mCi)
Na-22	185	(5)
Co-57	11,100	(300)
Co-58	11,100	(300)
Co-60	370	(10)
Ge-68	1,850	(50)
Sr-90	4,625	(125)
Ru-106	1,850	(50)
Ba-133	3 , 700	(100)
Cs-137	11,100	(300)
Ra-226	1,850	(50)
Lanthanides*	11,100	(300)
Actinides**	1,110	(30)

^{* (}Isotopes of Ce, Pr, Sm, Eu, Gd, Tm, and Yb only)

- 4. Management System Activities Records of Management System activities required by Paragraph 306 of the IAEA regulations shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
- 5. Expiration Date This certificate expires on October 31, 2025. Previous editions which have not reached their expiration date may continue to be used.

^{** (}Isotopes of Ac, Th, Pa, U, Pu, Am, and Cm only)

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This certificate is issued in accordance with paragraph(s) 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the October 9, 2020 petition by Eckert & Ziegler Isotope Products, Valencia, CA, and in consideration of other information on file in this Office.

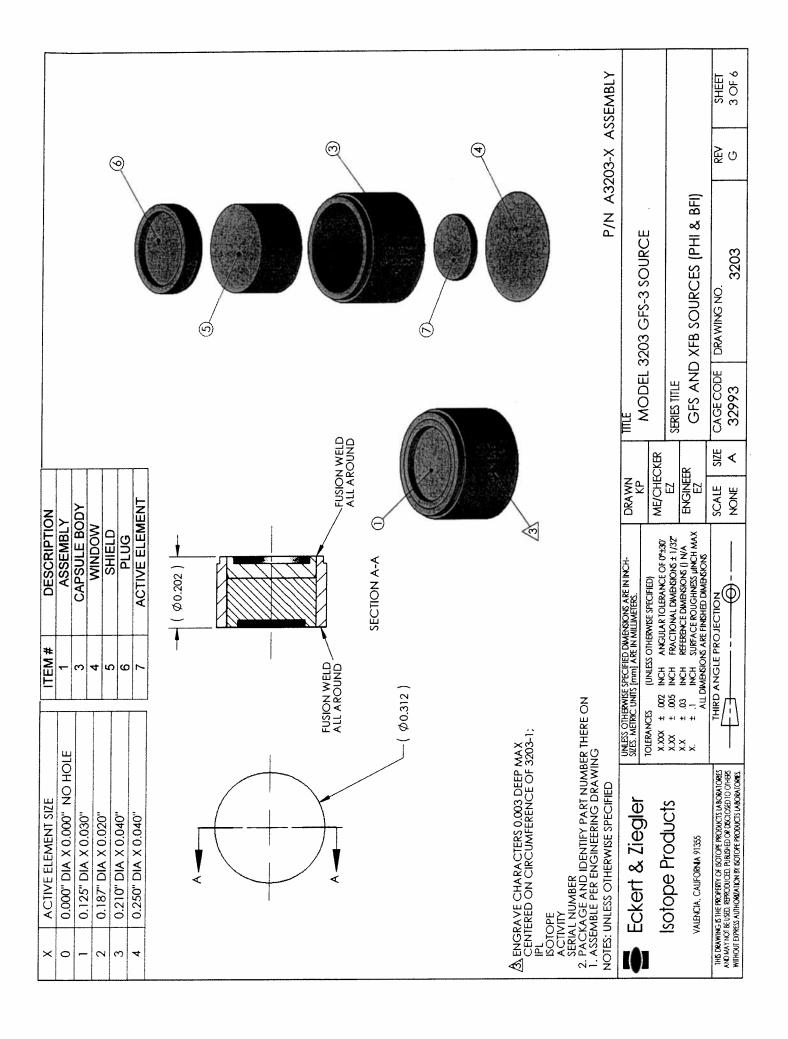
Certified By:

William Schoonover

Associate Administrator for Hazardous Materials Safety

October 29, 2020

Revision 11 - Issued to extend the expiration date.





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CERTIFICATE NUMBER: USA/0357/S-96

ORIGINAL REGISTRANT(S):

Eckert & Ziegler Isotope Products 24937 Avenue Tibbitts Valencia, CA, 91355 USA

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